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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,658	08/15/2000	Michael R. Hansen	WEYE115753	1795

26389 7590 04/19/2004

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EXAMINER
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NGUYEN, TAN D

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/639,658

Applicant(s)

HANSEN ET AL.

Examiner

Tan Dean D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 55,57-59,61,62,64,65 and 67-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55,57-59,61,62,64,65 and 67-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Request for Continued Examination (RCE)***

1. The request filed on 10/28/03 for a RCE under 37 CFR 1.114 based on parent Application No. 09/638,658 is acceptable and a RCE has been established. An action on the RCE follows.

***Response to Amendment***

2. The amendment filed 10/28/03 has been entered.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 55, 57-59, 61-62, 64-65, 67-79 (1-independent claim) are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over CHEN et al (US Patent 5,360,419).

As for claim 55, CHEN et al disclose a method for forming absorbent structure comprising a fibrous web of cellulosic material comprising:

a) providing chemical-containing cellulose fiber, the chemical-containing cellulose fiber comprising cellulose fiber having hydrogen bonding functional sites and from about 1 to 40% by weight based on the weight of the cellulose fiber of a chemical, wherein the chemical comprising non-polymeric chemical having functional groups selected from the group consisting of a hydroxyl (alcohol, diol (glycerin, glycol ) see col. 4, lines 50-57 (or 4:50-57), the chemical molecules having at least one functional group capable of forming a hydrogen bond or a coordinate covalent bond with superabsorbent particles (see 9:60-69, 10:1-15, or 15:20-28), and at least one functional group capable of forming a hydrogen bond with the cellulose fiber, and

b) combining superabsorbent particles with the chemical-containing cellulose fiber. (see col. 1, lines 30-45 (or 1:30-45), 3:45-55, 4:55-65, 6:10-20, 9:60-69, 10:1-15).

As for the limitation of a "binder" on the function of the chemical agent, this is inherently included in the agent above since the same material are used in the claimed

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invention (diol (glycerin or glycol)) or the same agent solution spraying to the web fiber.

As for the limitation of the last step "c) binding the particles to the fibers", this is inherently included in the process of CHEN et al because the same chemical agent (glycerin or glycols) are used and sprayed on the web fibers as in the claimed invention.

Alternatively, the selection or use of adjacent homologs or subsequent subspecies of the same class, i.e. diols or alcohols, would have been obvious to a skilled artisan as mere using equivalent material to achieve similar results, absent evidence of unexpected results. (see In re Mills, 126 USPQ 513, 316; 281 F2d 218 (CCPA)).

As for the limitation of the proportion or composition % of the binder as in claims 57 or 61, this is taught in 7: 27-35. Moreover, the changes in proportion is considered as optimizing operating conditions or result effective variables (i.e. varying with the desired product) and the optimizing of result effective variables is considered as routine experimentation to determine optimum or economically feasible reaction conditions and would have been obvious to the skilled artisan. In re Aller, 105 USPQ 233.

As for claim 58 or 76, this is shown on 3:10-20, and especially "other suitable fibers" are known. As for claim 59, or 78, this is inherently included in the use of "alcohol, glycerin, glycol" as indicated above or 4:50-60. As for claims 62, 64, 65, or 67, this is taught in 4:50-60, 1:30-45. As for claim 68, this is shown on 5:15-20. As for claims 69-70, this is shown on 15:25-30. As for the types of glycol as required in claims 71-75, or 77, this is shown on 4:55-58. Alternatively, the selection or use of adjacent homologs or subsequent subspecies of the same class, i.e. diols or alcohols, would have been obvious to a skilled artisan as mere using equivalent material to achieve

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similar results, absent evidence of unexpected results. (see *In re Mills*, 126 USPQ 513, 316; 281 F2d 218 (CCPA)). As for claim 79, this is rejected for the same reason set forth in claim 59 or 78. Alternatively, the selection or use of adjacent homologs or subsequent subspecies of the same class, i.e. hydroxy acid species, (hydroacetic acid ( $\text{CH}_2\text{-OH-COOH}$ ), lactic acid ( $\text{CH}_3\text{CH-OH-COOH}$ ), would have been obvious to a skilled artisan as mere using equivalent material (hydrogen bond and/or coordinate covalent bond) to achieve similar results, absent evidence of unexpected results. (see *In re Mills*, 126 USPQ 513, 316; 281 F2d 218 (CCPA)).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) NPL: Article "Iced Food....Absorbing Pad" by Bair is cited to teach an absorbing pad with superabsorbent powder particles, wood pulp pad and binder.

2) NPL: Article "Method of Treating discontinuous fibers" is cited to teach discontinuous fibers containing superabsorbent powder particles, wood pulp and binder.

3) US 5,877,097 discloses a densified cellulose fibers containing superabsorbent powder particles, wood pulp and binder.

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9. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel and not to the examiner. As the official records and applications are located in the clerical section of the examining Tech Center, the clerical personnel can readily provide status information without contacting the examiner. See MPEP 203.08. The Tech Center clerical receptionist number is (703) 308-1113 or <http://pair-direct.uspto.gov>

In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (703) 306-5771, or e-mail [CustomerService3600@uspto.gov](mailto:CustomerService3600@uspto.gov) .


Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (703) 308-2053. My work schedule is normally Monday through Friday from 7:00 am through 4:30 pm.

Should I be unavailable during my normal working hours, my supervisor John Weiss may be reached at (703) 308-2702. The FAX phone numbers for formal communications concerning this application are (703) 872-9306. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

Other possibly helpful telephone numbers are:

Allowed Files & Publication	(703) 305-8322
Assignment Branch	(703) 308-9287
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/ 8335
Fee Questions	(703) 305-5125
Intellectual Property Questions	(703) 305-8217
Petitions/Special Programs	(703) 305-9282
Terminal Disclaimers	(703) 305-8408
Information Help Line	1-800-786-9199

dtn  
April 5, 2004

  
**DEAN T. NGUYEN**  
**PRIMARY EXAMINER**